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providing two conveyors for at least one workpiece each and a transport arm for each conveyor mounted opposite each other to and projecting from said drive shaft,

said arms being operatively coupled to said conveyors to move said conveyors independently of each other relative to said drive shaft,

applying a workpiece to each of said conveyors,

providing at one of said two openings a treating station,

rotating said transport device and therewith said workpieces by 180° so as to align each of said two workpieces with one of said openings,

moving said conveyors with said workpieces by said respective arms towards said two openings and treating one of said two workpieces at said one of said openings by said treatment chamber.

REMARKS

Reconsideration and allowance of this application are respectfully requested in view of the above amendment and discussion below.

Applicants' invention is addressed to an apparatus and a method for processing at least one workpiece with a vacuum chamber having two opening areas and a transport device with a drive shaft rotatable around a rotational axis. Two conveyors each have a workpiece with transport arms for respective conveyors being mounted opposite each other and projecting from the drive shaft. These arms are coupled to the conveyor to move the conveyors independently of each other with a radial component relative to the drive shaft.

Claims 35 to 72 have been rejected under 35 USC 251 as based upon new matter with respect to the term "draft shaft". In response to this rejection, applicants have amended claims 35, 37 and 52 to refer to the "drive shaft".

The reissue oath was indicated as defective because of the reasons indicated at Item 3 of the Office Action. In response to this rejection, applicants are submitting herewith a Supplemental Declaration reflecting the Preliminary Amendment filed on July 19, 2000 as well as the above amendment. It is to be noted that under existing requirements for oaths in a reissue application, only one error needs to be alleged, and that error existed because Claims 1 and 16 claimed less than the inventor had a right to claim.

Claims 35 to 72 have been rejected under 35 USC 251 as being improper because it attempts to recapture subject matter surrendered in the application for patent. More specifically, the term "projecting from" was objected to because, according to the Office Action, in the patented file, Claim 1 was amended to overcome a rejection and this term "projected from" was added in order to overcome a prior art reference.

Applicants respectfully traverse this rejection on the grounds that in the patented file of U.S. Patent No. 5,245,736, the Office Action of December 4, 1992 contained an indication that Claim 9 was allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Therefore, the amendment of March 4, 1993 combined Claims 1, 8 and 9 into independent amended Claim 1 including the limitation "projecting from" which came from the deleted Claim 8. Claim 8 did not contain indicated allowable subject matter. Therefore, the language "projecting from" did not result in the

allowance of the application because that language "projecting from" was rejected in the above-mentioned Patent Office Action. Thus, applicants respectfully request the removal of the rejection under 35 USC 251 because there is no attempt to recapture material surrendered in the application in order to obtain allowance.

Claims 35 to 72 have been rejected under 35 USC 112, first paragraph with respect to the term "draft shaft", which, as indicated above, has been changed. Furthermore, Claims 35 to 57, 70 and 72 are also rejection under 35 USC 112, second paragraph for the same reasons, with additional indications being made concerning proper antecedent basis for Claims 60, 62, 63, 70 and 72. In response to this rejection, applicants have canceled Claims 60, 62, 63 and 70 and have amended Claim 72 to provide proper antecedent basis.

Claims 35 to 45, 49, 50, 52-60, 62, 64, 66 and 68-72 have been rejected under 35 USC 102 as anticipated by the reference to Schertler U.S. Patent No. 3,915,117, as indicated at Item 14 on pages 7-8 of the Patent Office Action. Claims 46-48, 61, 63 and 65 have also been rejected under 35 USC 103 as unpatentable over Schertler in view of Lavinsky et al. U.S. Patent No. 5,126,992, and Claims 51 and 67 have been rejected as being obvious under 35 USC 102 over the reference to Schertler. Lastly, Claims 35-47, 49-64 and 66-72 have been rejected under 35 USC 102 as unpatentable over Boys et al U.S. Patent No. 4,795,299 in view of Mink U.S. Patent No. 4,492,512 for the reasons indicated at Item 18 on pages 10 and 11 of the Patent Office Action.

In response to these rejections, applicants have canceled Claims 55-71 and amended independent Claims 35 and 72.

The reference to Schertler U.S. Patent No. 3,915,117 has two conveyors which do not have transport arms mounted opposite each other and do project from the drive shaft, as is claimed in Claim 35 and in Claim 72. Additionally, the arms of Schertler are not operatively coupled to the conveyors in order to move both conveyors with a radial component relative to the drive shaft. The transport arms 24 of Schertler are mounted to the casing of the chamber parallel to the axis of the drive shaft 4 in order to move the conveyors parallel to the axis of the drive shaft.

Applicants' invention concerning the mounting of the transport arms to the drive shaft in mutually opposing positions and projecting from the drive shaft, as is now claimed in independent Claim 35 provides not only a different structure but a different approach than the '117 reference to Schertler. According to applicants' invention, the claimed structure allows the transport device with the arms and conveyors to be a self-contained unit with no members for conveying the workpiece being mounted to the casing. As a result of these structural differences, the same transport device with the drive shaft arms and conveyors may be used for differently tailored chambers and the conveyance of the workpieces according to the present invention has at least a radial component which is impossible to realize using the apparatus of Schertler. By providing the possibility of conveying the workpieces at least with a radial component and with respect to the drive shaft, it is possible to provide treatment chambers along the rim surface around the chamber. It must be emphasized that these advantages are brought about by the claimed structure differences and the claimed limitations differences.

Concerning the rejection of the claims based on the references to Boys and Mink, applicants submit that the reference to Boys, even excepting the statement of the Examiner with respect to the showing of Boys, has no teaching that the arms move the conveyors independently of each other and with a radial component relative to the drive shaft. This lack of a teaching or showing in Boys is not supplemented by the reference to Mink because the reference to Mink is directed to a vacuum chamber and the arms of Mink's device are not able to move independently of each other and with a radial component relative to the shaft. The operation of the device of Mink, as described at column 5, beginning at line 10, is such that the arms 17 of Fig. 1 only pivot under overload conditions. The arms 17 may only be lifted together with the arrangement 32 and rotated about the central axis of Mink's arrangement. Thus, all of the arms 17 of Mink are lifted and rotated together, driven by the single common drive arrangement and gearing. Therefore, it is submitted that the claims of the present invention patentably define over any combination of Mink and Boys which would be obvious to one of ordinary skill in the art.

Therefore, in view of the distinguishing features between the claimed invention and the references, and in view of the changes to the claims to obviate the rejections under 35 USC 112, applicants respectfully request that this application containing claims 35-54 and 72 be allowed and passed to issued.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #622/40901C2).

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES

35. (Amended) A vacuum process apparatus for processing at least one workpiece, comprising a chamber with

two openings defining respective opening areas; and

a transport device with said vacuum chamber having a drive shaft rotatable around a rotational axis of said drive shaft;

two conveyors for at least one workpiece each, and a transport arm for each conveyor mounted opposite each other to and projecting from said [draft] drive shaft;

said arms being operatively coupled to said conveyors to move said conveyors independently of each other with a radial component relative to said [draft] drive shaft.

37. The apparatus of Claim 35, wherein said conveyors are movable normally with respect to said [draft] drive shaft.

52. A vacuum chamber for processing at least one workpiece, comprising two openings defining respective opening areas; a transport device with a [draft] drive shaft for rotating said transport device around a rotational axis of said [draft] drive shaft; two conveyors and a transport arm for each conveyor mounted opposite each other to said drive shaft and each being operatively coupled to one of said conveyors to move said conveyors independently of each other relative to said drive shaft.

72. (Amended) A method [of processing] for manufacturing at least two workpieces, comprising the steps of [rotating a transport device member around a rotational axis by 180° to bring the two workpieces adjacent an opening in a vacuum chamber having at least two openings, and moving two conveyors radially relative to said rotational axis, independently of each other relative to the transport device member so as selectively to move the two workpieces towards and away from the adjacent openings]

providing a vacuum chamber with two openings defining respective opening areas,

providing a transport device having a drive shaft rotatable around a rotational axis of said drive shaft,

providing two conveyors for at least one workpiece each and a transport arm for each conveyor mounted opposite each other to and projecting from said drive shaft,

said arms being operatively coupled to said conveyors to move said conveyors independently of each other relative to said drive shaft,

applying a workpiece to each of said conveyors,

providing at one of said two openings a treating station,

rotating said transport device and therewith said workpieces by 180° so as to align each of said two workpieces with one of said openings,

moving said conveyors with said workpieces by said respective arms towards said two openings and treating one of said two workpieces at said one of said openings by said treatment chamber.